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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/980,623 | 12/05/2001 | Muneo Sakurada | R0108T | 8159 |

7590 07/26/2002

Yusuke Takeuchi
Kanesaka & Takeuchi
727 S 23rd Street
Arlington, VA 22202

EXAMINER

FLANIGAN, ALLEN J

ART UNIT

PAPER NUMBER

3743

DATE MAILED: 07/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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Re-mail

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| | | |
|------------------------------|-------------------|-----------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/980,623 | SAKURADA ET AL. |
| | Examiner | Art Unit |
| | Allen J. Flanigan | 3743 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____ .
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on ____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____ .
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ . | 6) <input type="checkbox"/> Other: _____ |

A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because the specification contains numerous grammatical and idiomatic errors resulting from the translation from the priority document rendering piecemeal correction unduly burdensome.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and must be accompanied by: 1) a statement that the substitute specification contains no new matter; and 2) a marked-up copy showing the amendments to be made via the substitute specification relative to the specification at the time the substitute specification is filed.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “two or more heat exchangers . . . integrally configured using a common member” of claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Tanaka et al.

The recitations regarding “windward” and “leeward” sides of the combined heat exchanger concern the intended method of using the claimed device (how it will be oriented in use relative to airflow direction therethrough) and cannot distinguish over the structure shown in Tanaka et al. notwithstanding that Tanaka et al. indicate a preference for airflow crossing the greater height tubes first. Obviously, Tanaka et al.’s device is capable of use with air flowing through either direction.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 102(a) as anticipated by Tanaka et al. or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tanaka et al. in view of Fukuoka et al. and Yamamoto et al.

Tanaka et al. appear to show tube heights within the claimed range, in that the differential in height is said to range from 0.2-0.5 mm, and as seen in Fig. 2, the differential in height appears to be from 1/3 to 1/5 the tube height, so that at the lower limit of this range, the tube 6 of maximum height would be approximately 0.10 mm in height. Even if Tanaka et al. does not expressly disclose a value falling within this range, the routine optimization of parameters known to be result effective is considered obvious. Fukuoka et al. and Yamamoto et al. both disclose that providing tube heights in the claimed range is known, and show that tube height is known as a result-effective variable. Thus, it would have been obvious to select a tube height for Tanaka et al. providing optimum efficiency for a given application.

Claim 4 is rejected under 35 U.S.C. 102(a) as anticipated by Tanaka et al. or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tanaka et al. in view of Sugimoto et al.

Again, it appears that the combined core of Tanaka et al. shows spacing between the cores within the claimed range. Even if this is not the case, Sugimoto et al. provide recognition that such a spacing dimension is known to be a result effective variable, and that minimizing this spacing increases efficiency of the condenser. Thus, it would have been obvious to provide a

clearance between the cores of Tanaka et al. as small as possible for greater efficiency.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (703) 308-1015. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on (703) 308-0101. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7764 for regular communications and (703) 305-3463 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.


Allen J. Flanigan
Primary Examiner
Art Unit 3743

AJF
June 24, 2002